



TATA

TATA Indian Institute of Skills



Factory Automation Training Course

(in partnership with **Festo India**)

GET QUALIFIED AND LEARN
FROM THE KEY DRIVERS OF AUTOMATION

FESTO

Technology Partner

RESKILLING REFRESHER TRAINING

Five days program for Working Engineers/Technicians

Introduction to Factory Automation

Course Contents:

- **Concept of Factory Automation**
- **Building blocks of factory automation system**
 - Industrial Pneumatics in factory automation.
 - Automation with Electro-pneumatic controls



Industrial Pneumatics in Factory Automation



Course Contents:

Introduction to Pneumatics

- Choice of working Media
- Pneumatics versus Hydraulics
- Pneumatics-Advantages & Applications

Valves

- Directional Control Valve
- Logic Valve
- Time Delay Valve
- Pressure sequence Valve

Pneumatic Cylinders

- Cylinder types/symbols/construction

Air Preparation/Distribution

Practical exercises using purely pneumatic components

Maintenance of Pneumatic systems.

Automation with Electro - Pneumatic Controls



Course Contents:

Introduction to Electro - Pneumatics

- Elements of Electro-Pneumatic system

Solenoid Actuated Valves

- Functional principle of a solenoid valve
- Internal construction of Solenoid valves

Switches, Relays & Contactors

- Types of contacts
- Internal construction of a Relay

The Latching circuits

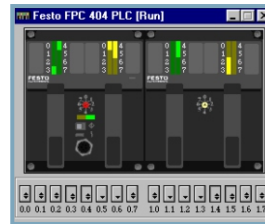
- Types of latches
- Application of latches

Sensors

- Commonly used sensors in industry (Reed switch, Magnetic, Inductive, Capacitive Optical)

Practical exercises using relay and timer logic with Troubleshooting

PLC Ladder Programming



Course Contents:

Introduction to PLC's

- Block diagram & construction of PLC

Interfacing of PLC to external devices

- Input devices
- Output devices

PLC Programming languages

- Ladder LAD
- Function Block Diagram FBD
- Statement list STL

Exercises with single cylinder Actuators



Developing complex PLC Programs

- Systematic analysis of complex sequences.
- Choosing appropriate PLC programming techniques.
- Combining different PLC programming techniques.

Who should attend?

Working Professionals, Technicians, and Instructors interested to learn new skills in manufacturing sectors.

When is the schedule?

Every week one batch of 12-15 will be admitted starting 25th December till end of June 2021

Duration:

Monday to Friday 10 am to 5 pm theory & practical and Assessment Test on Saturday 10 am to 12 pm

Venue:

Festo India Pvt Ltd.

- Mumbai: "Raheja Point 1" Vokala, Santacruz (East) - 400 055
- Pune: T130 MIDC, Bhosari, 411 026
- Ahmedabad: 33, Sardar Patel Nagar, Near Hotel Nest St.Xavier's College Corner, Off. C.G Road, Navarangpura 380 006

National Skill Training Institute

- Mumbai: V. N. Purav Marg, Opp. Priyadarshini (RCF), Chunabhatti, Sion, Mumbai 400022

Course Fee:

Registration & Certification fee will be Rs.5000/- per week per candidate of which Rs.2000/- will be refunded upon successful course completion.

Registration:

The number of participants are limited and registrations are dealt with on a first-come, first-served basis.

Bookings:

Booking will be confirmed against payment of course fees in advance only.

Certification:

TATA Indian Institute of Skills will carry out the assessment and issue completion certificate to successful participants.

About TATA IIS

Tata IIS is a new venture of TATA established to impart skills in emerging manufacturing sectors and functions. The courses initially envisaged will be a series of Short Term Courses targeted towards fresh students from ITI/Polytechnics and to reskilling and upskilling of working technicians from industry.

About Festo

Festo is a worldwide leader in automation and with Festo Didactic a world market leader in technical training and development.

Festo Didactic underscores its standing as one of the world's leading training providers with certification according to DIN ISO 29990:2010, the standard for quality management of educational institutions in Germany.

Festo Training is always designed with an action-focused approach and for quick implementation in work place. This helps the students to gain practical knowledge of current technologies thus improving their employability prospects. It is a win-win situation for the students as well as the employer.



TATA Indian Institute of Skills

Mumbai

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